

### ABSTRACT

An apparatus for radially centering a treatment region of a brachytherapy catheter in a lumen of a body vessel. The centering apparatus includes a monofilament wire-form that is pre-shaped to have an expanded configuration having multiple lobes arranged in a radially symmetrical staggered sequence along the treatment region of the catheter. The centering apparatus also has a collapsed configuration that is formable about the catheter by drawing apart the ends of the wire-form. This abstract is provided to comply with the rules requiring an abstract which will allow a searcher or other reader to quickly ascertain the subject matter of the technical disclosure. It is submitted with the understanding that it will not be used to interpret or limit the scope or meaning of the claims. 37 CFR 1.72(b)